

THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1. (Previously Presented) A character display apparatus, comprising:
 - a display device comprising a plurality of pixels; and
 - a control section for controlling the display device, wherein each of the plurality of pixels comprises a plurality of sub-pixels arranged in a predetermined direction, and at least one of a plurality of color elements is assigned to each of the plurality of sub-pixel;
 - the control section determines at least one sub-pixel, to which a basic portion indicating a skeleton of a character is assigned, among the plurality of sub-pixels in the display device, based on character shape data indicating character shapes;
 - a first pixel of the plurality of pixels comprises a plurality of first sub-pixels;
 - at least one pixel neighboring the first pixel comprises a plurality of second sub-pixels;
 - the control section determines an arrangement pattern containing a plurality of elements, wherein a value of each of the plurality of elements is determined depending on whether or not the basic portion is assigned to a corresponding sub-pixel of the plurality of the first sub-pixels and the plurality of the second sub-pixels; and
 - the control section introduces a predetermined change into the arrangement pattern, the predetermined change including one of replacement of a position of the basic portions and duplication of the basic portion, and determines a luminance level of the first pixel based on the

changed arrangement pattern, wherein

the luminance level of the first pixel based on the changed arrangement pattern is determined using a stored table indicating a correspondence between arrangement patterns of sub-pixels and luminance levels of sub-pixels arranged in a certain direction, which is one of the same as the predetermined direction and different from the predetermined direction.

2.(Original) An apparatus according to claim 1, wherein

the plurality of elements include a first element and a second element neighboring the first element;

a value of the first element indicates that the basic portion is assigned to a sub-pixel relating to the first element;

a value of the second element indicates that the basic portion is not assigned to a sub-pixel relating to the second element; and

the control section determines the luminance level of the first pixel based on another arrangement pattern which is modified from said arrangement pattern such that a value of the first element is interchanged with a value of the second element.

3. (Previously Presented) An apparatus according to claim 1, wherein the plurality of elements include a first element and a second element neighboring the first element;

a value of the first element indicates that the basic portion is assigned to a sub-pixel relating to the first element;

a value of the second element indicates that the basic portion is not assigned to a subpixel relating to the second element; and

the control section determines the luminance level of the first pixel based on another arrangement pattern which is modified from said arrangement pattern such that a value of the second element is changed to indicate that the basic portion is assigned to the sub-pixel relating to the second element.

4. (Original) An apparatus according to claim 1, wherein the control section determines the luminance level of the first pixel based on a combination of a color of the character and a background color of the character and the arrangement pattern.

5. (Original) An apparatus according to claim 1, wherein the control section compares a combination of a color of the character and a background color of the character with a combination of a predetermined character color and a predetermined background color, and determines the luminance level of the first pixel based on a result of the comparison and the arrangement pattern.

6. (Previously Presented) A method for displaying a character on a character display apparatus, wherein the character display apparatus comprises:

a display device comprising a plurality of pixels; and

a control section for controlling the display device, wherein each of the plurality of pixels comprises a plurality of sub-pixels arranged in a predetermined direction, and at least one of a plurality of color elements is assigned to each of the plurality of sub-pixel;

a first pixel of the plurality of pixels comprises a plurality of first sub-pixels; and

at least one pixel neighboring the first pixel comprises a plurality of second sub-pixels, the method comprises the steps of:

determining at least one sub-pixel, to which a basic portion indicating a skeleton of a character is assigned, among the plurality of sub-pixels in the display device, based on character shape data indicating character shapes;

determining an arrangement pattern containing a plurality of elements, wherein a value of each of the plurality of elements is determined depending on whether or not the basic portion is assigned to a corresponding sub-pixel of the plurality of the first sub-pixels and the plurality of the second sub-pixels; and

introducing a predetermined change into the arrangement pattern, the predetermined change including one of replacement of a position of the basic portions or-and duplication of the basic portion, and determining a luminance level of the first pixel based on the changed arrangement pattern, wherein

the luminance level of the first pixel based on the changed arrangement pattern is determined using a stored table indicating a correspondence between arrangement patterns of sub-pixels and luminance levels of sub-pixels arranged in a certain direction, which is one of the same as the predetermined direction and different from the predetermined direction.

Claim 7 (Canceled)

8. (Previously Presented) A recording medium storing a program for causing a character display apparatus to execute a character display process, wherein the recording medium is readable by the character display apparatus, the character display apparatus comprises:

a display device comprising a plurality of pixels; and

a control section for controlling the display device, wherein each of the plurality of pixels

comprises a plurality of sub-pixels arranged in a predetermined direction, and at least one of a plurality of color elements is assigned to each of the plurality of sub-pixel;

a first pixel of the plurality of pixels comprises a plurality of first sub-pixels; and

at least one pixel neighboring the first pixel comprises a plurality of second sub-pixels, and the character display process comprises the steps of:

determining at least one sub-pixel, to which a basic portion indicating a skeleton of a character is assigned, among the plurality of sub-pixels in the display device, based on character shape data indicating character shapes;

determining an arrangement pattern containing a plurality of elements, wherein a value of each of the plurality of elements is determined depending on whether or not the basic portion is assigned to a corresponding sub-pixel of the plurality of the first sub-pixels and the plurality of the second sub-pixels; and

introducing a predetermined change into the arrangement pattern, the predetermined change including one of replacement of a position of the basic portion or-and duplication of the basic portion, and determining a luminance level of the first pixel based on the changed arrangement pattern, wherein

the luminance level of the first pixel based on the changed arrangement pattern is determined using a stored table indicating a correspondence between arrangement patterns of sub-pixels and luminance levels of sub-pixels arranged in a certain direction, which is one of the same as the predetermined direction and different from the predetermined direction.